

SEQUENCE LISTING

<110> Cahoon, Rebecca E.  
Falco, S. Carl  
Famodu, Layo O.  
Hitz, William D.  
Rendina, Alan

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<151> July 21, 1998

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Tyr Arg Pro Lys Trp Glu Gly Gly Glu Tyr Glu Gly Asp Asp Asp Ser  
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Arg Phe Glu Ala Leu Leu Ala Met Glu Leu Gly Ala Glu Tyr Val  
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Asp Val Glu Leu Lys Val Ala Asp Lys Phe Met Lys Leu Ile Ser Gly  
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Arg Asn Pro Asp Asn Cys Lys Leu Ile Val Ser Ser His Asn Tyr Glu  
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Thr Thr Pro Ser Ser Glu Glu Leu Ala Asn Leu Val Ala Gln Ile Gln  
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Lys Lys Gly Lys Glu Ser Ala Pro Ala Gln Pro Thr Ala Ala Asp Leu  
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<212> DNA

<213> Oryza sativa

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 Asp Ala Thr Lys Ile Ser Ala Pro Gly Gln Pro Thr Val Lys Glu Leu  
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 Cys Cys His Glu His Asp Pro Val Ala Lys Ser Ile Gly Ala Ile Asn  
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Tyr Ile Gly Ala Ile Ser Ala Ile Glu Asp Gly Ile Gly Gly Pro Gly  
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 Glu Thr Phe Arg Pro Glu Glu Gly Met Ile Leu Ala Asn Ala Thr Ser  
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 Thr Arg Leu Leu Arg Glu Ala Glu Glu Cys Gly Ile Lys Val Val Ser  
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 Arg Leu Ala Met Glu Leu Gly Ala Asp Tyr Ile Asp Ile Glu Leu Gln  
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Gly Tyr Leu Thr Phe Gly Thr Leu Glu Ser Gly Val Val Ser Ala Pro  
 210 215 220  
 Gly Gln Pro Thr Leu Lys Asp Leu Leu Tyr Leu Tyr Asn Leu Arg Gln  
 225 230 235 240  
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 His Ser Lys Ser Pro Ile Leu Phe Asn Glu Val Phe Lys Ser Ile Gly  
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 325 330 335  
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 340 345 350  
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 355 360 365  
 Ser Pro Leu Ala Gly Lys Leu Phe Val Val Ile Gly Ala Gly Ala  
 370 375 380  
 Gly Lys Ala Leu Ala Tyr Gly Ala Lys Ala Lys Gly Ala Arg Val Val  
 385 390 395 400  
 Ile Ala Asn Arg Thr Tyr Asp His Ala Arg Lys Leu Ala Tyr Ala Ile  
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 Gly Gly Asp Ala Leu Ala Leu Ala Asp Leu Asp Asn Tyr His Pro Glu  
 420 425 430  
 Asp Gly Met Ile Leu Ala Asn Thr Thr Ser Ile Gly Met Gln Pro Lys  
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 Val Asp Glu Thr Pro Val Ser Lys His Ala Leu Lys Tyr Tyr Ser Leu  
 450 455 460  
 Val Phe Asp Ala Val Tyr Thr Pro Lys Ile Thr Arg Leu Leu Lys Glu  
 465 470 475 480  
 Ala Glu Glu Ser Gly Ala Thr Ile Val Thr Gly Leu Glu Met Phe Met  
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Arg Gln Ile Gly Pro Asp Thr Lys Val Phe Gly Ile Ile Gly Asn Pro
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Lys Phe Leu Ser Thr Tyr Ser Ser Pro Asp Phe Ala Gly Phe Ser Cys
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130          135          140

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<213> Zea mays

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 Gly Gly His Glu Asn Ser His Asn Ser Val Asp Glu Ala Leu Leu Leu  
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 Lys Arg Lys Ser Glu Glu Val Leu Phe Tyr Leu Asn Gly Arg Cys Ile  
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 Tyr Leu Val Gly Met Met Gly Ser Gly Lys Ser Thr Val Gly Lys Ile  
 100 105 110  
 Met Ser Glu Val Leu Gly Tyr Ser Phe Phe Asp Ser Asp Lys Leu Val  
 115 120 125  
 Glu Gln Ala Val Gly Met Pro Ser Val Ala Gln Ile Phe Lys Val His  
 130 135 140  
 Ser Glu Ala Phe Phe Arg Asp Asn Glu Ser Ser Val Leu Arg Asp Leu  
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 Ser Ser Met Arg Arg Leu Val Val Ala Thr Gly Gly Ala Val Ile  
 165 170 175

Arg Pro Ile Asn Trp Arg Tyr Met Lys Arg Gly Leu Ser Val Trp Leu  
180 185 190

Asp Val Pro Leu Asp Ala Leu Ala Arg Arg Ile Ala Lys Val Gly Thr  
195 200 205

Ala Ser Arg Pro Leu Leu Asp Gln Pro Ser Gly Asp Pro Tyr Ala Met  
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Ala Phe Ser Lys Leu Ser Met Leu Ala Gln Gln Arg Gly Asp Ala Tyr  
225 230 235 240

Ala Asn Ala Asp Val Arg Val Ser Leu Glu Glu Ile Ala Cys Lys Gln  
245 250 255

Gly His Asp Asp Val Ser Lys Leu Thr Pro Thr Asp Ile Ala Ile Glu  
260 265 270

Ser Leu His Lys Ile Glu Ser Phe Val Ile Glu His Thr Ala Asp Ser  
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Leu  
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<211> 899  
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<213> Zea mays

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tggatggatg atgggttca gcaaaactac agttgggaag atactatccg aagtgtttagg 180  
ttattcgttc ttgcacagtg ataagtttgt agagaaggct gttggtattt catctgttgc 240  
tgagatcttt cagctccata gcgaaacatt cttcagagat aatgagagtg aggtcctgac 300  
ggatctgtca tcaatgcatt ggttgggtgt tgcaaccgga ggtggcag tgatccgacc 360  
aatcaattgg agttacatga agaaagggtt gaccgtatgg ttagatgtcc cactggatgc 420  
acttgcaaga agaatcgctg ctgttaggaac cgcgtctcga ccactcttgc atcaggaatc 480  
cggtgatcct tatgcaaagg cttatgcaaa acttacgtca cttttgagc aaagaatgga 540  
ctcgtatgct aatgctgtatc ccagagttt acttgaacat attgcattaa aacaaggcca 600  
taatgtatgc actatactta cacctgtac catcgccatt gaggcattgc taaagatgga 660  
aagttttctt accgagaaga ccatggtcag aaactgaccc tttgaatgag agggaaagga 720  
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aactctttctt acagtgttgtt tggattattt tttgtgcagc atgaaagagg accgtttgag 840  
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<211> 231  
<212> PRT  
<213> Zea mays

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Asp Asp Ala Leu Ile Leu Gln Gln Lys Ala Gln Asp Val Leu Pro Tyr  
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Leu Asp Gly Arg Cys Val Tyr Leu Val Gly Met Met Gly Ser Gly Lys  
                  35                         40                         45

Thr Thr Val Gly Lys Ile Leu Ser Glu Val Leu Gly Tyr Ser Phe Phe  
                  50                         55                         60

Asp Ser Asp Lys Leu Val Glu Lys Ala Val Gly Ile Ser Ser Val Ala  
                  65                         70                         75                         80

Glu Ile Phe Gln Leu His Ser Glu Thr Phe Phe Arg Asp Asn Glu Ser  
                  85                         90                         95

Glu Val Leu Thr Asp Leu Ser Ser Met His Arg Leu Val Val Ala Thr  
                  100                         105                         110

Gly Gly Gly Ala Val Ile Arg Pro Ile Asn Trp Ser Tyr Met Lys Lys  
                  115                         120                         125

Gly Leu Thr Val Trp Leu Asp Val Pro Leu Asp Ala Leu Ala Arg Arg  
                  130                         135                         140

Ile Ala Ala Val Gly Thr Ala Ser Arg Pro Leu Leu His Gln Glu Ser  
                  145                         150                         155                         160

Gly Asp Pro Tyr Ala Lys Ala Tyr Ala Lys Leu Thr Ser Leu Phe Glu  
                  165                         170                         175

Gln Arg Met Asp Ser Tyr Ala Asn Ala Asp Ala Arg Val Ser Leu Glu  
                  180                         185                         190

His Ile Ala Leu Lys Gln Gly His Asn Asp Val Thr Ile Leu Thr Pro  
                  195                         200                         205

Ser Thr Ile Ala Ile Glu Ala Leu Leu Lys Met Glu Ser Phe Leu Thr  
                  210                         215                         220

Glu Lys Thr Met Val Arg Asn  
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<210> 13  
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 caccgtctcc gcgccttccc aagctcgaa atacctctag aggaactcaa cccatccgtc 180  
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 aaaaaaaaaa aactcnangg gggggcccg taccattc cccctaaaat ggagtn 1077

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 <212> PRT  
 <213> Zea mays

<220>  
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 20 25 30

Cys Thr Ala Arg Cys Ile Gln Arg His Arg Leu Arg Ala Phe Pro Ser  
 35 40 45

Ser Glu Ile Pro Leu Glu Glu Leu Asn Pro Ser Val Asp Leu Leu Arg  
 50 55 60

Arg Thr Ala Glu Ala Val Gly Asp Phe Arg Lys Thr Pro Ile Tyr Ile  
 65 70 75 80

Val Gly Thr Asp Cys Thr Ala Lys Arg Asn Ile Ala Lys Leu Leu Ala  
 85 90 95

Asn Ser Ile Ile Tyr Arg Tyr Leu Ser Ser Glu Glu Leu Leu Glu Asp  
 100 105 110

Val Leu Gly Gly Lys Asp Ala Leu Arg Ala Phe Lys Glu Ser Asp Glu  
 115 120 125

Xaa Gly Tyr Leu Glu Val Glu Thr Glu Gly Leu Lys Gln Leu Thr Ser  
 130 135 140

Met Gly Asn Leu Val Leu Cys Cys Gly Asp Gly Ala Val Met Asn Ser  
 145 150 155 160

Thr Asn Leu Arg Leu Leu Lys His Gly Val Ser Ile Trp Ile Asp Val  
 165 170 175

Pro Leu Glu Met Ala Thr Asn Asp Met Leu Lys Asn Thr Gly Thr Gln  
 180 185 190

Ala Thr Thr Asp Pro Asp Ser Phe Ser Gln Ala Met Ser Lys Leu Arg  
 195 200 205

Gln Arg Tyr Asp Glu Leu Lys Glu Arg Tyr Gly Val Ser Asp Ile Thr  
 210 215 220

Val Ser Val Gln Asn Val Ala Ser Gln Arg Gly Tyr Ser Ser Ile Asp  
 225 230 235 240

Leu Val Thr Leu Glu Asp Met Val Leu Glu Ile Val Arg Gln Ile Glu  
 245 250 255

Lys Leu Ile Arg Ala Lys Glu Met Met Glu Ala Ala Gly Lys Pro Phe  
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 <213> Oryza sativa

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 gggttcggcg gctccgaccg cgcgcggagc gcgctctacg gcggcgaggg gcgggcggcg 180  
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 aactcggttg atgaaggccct cttgctaaag agaaaatcag aagaagttct cttctatgg 360  
 aatggacggt gtatttacct agttggaaatg atgggttctg gaaaaagttac tggggaaag 420  
 atcatgtctg aagttttggg ttattcggtc tttgatagtg ataaatttgtt caacaagctg 480  
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 gtgg 544

<210> 16  
 <211> 155  
 <212> PRT  
 <213> Oryza sativa

<400> 16  
 Met Glu Ala Gly Val Gly Leu Ala Leu Gln Ser Arg Ala Ala Gly Phe  
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Gly Gly Ser Asp Arg Arg Ser Ala Leu Tyr Gly Gly Glu Gly Arg  
 20 25 30

Ala Arg Ile Gly Ser Leu Arg Val Ala Glu Pro Ala Val Ala Lys Ala  
 35 40 45

Ala Val Trp Ala Arg Gly Ser Lys Pro Val Ala Pro Leu Arg Ala Lys  
 50 55 60

Lys Ser Ser Gly Gly His Glu Thr Leu His Asn Ser Val Asp Glu Ala  
65 70 75 80

Leu Leu Leu Lys Arg Lys Ser Glu Glu Val Leu Phe Tyr Leu Asn Gly  
85 90 95

Arg Cys Ile Tyr Leu Val Gly Met Met Gly Ser Gly Lys Ser Thr Val  
100 105 110

Gly Lys Ile Met Ser Glu Val Leu Gly Tyr Ser Val Phe Asp Ser Asp  
115 120 125

Lys Leu Val Gln Gln Ala Val Gly Met Pro Ser Val Ala Gln Ile Phe  
130 135 140

Lys Gly His Ser Glu Ala Phe Leu Lys Asp Ser  
145 150 155

<210> 17

<211> 1098

<212> DNA

<213> Oryza sativa

<400> 17

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atcccttact tctggaatca ctcagcttt gacaggatt agtggcata ttgttggta 180  
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aaaaaaaaaaaaaaa 1098

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<211> 252

<212> PRT

<213> Oryza sativa

<400> 18

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Asp Gln Leu Val Val Asn Leu Lys Lys Val Glu Gln Glu Leu Lys Trp  
20 25 30

Pro Asp Ile Asp Glu Ser Trp Glu Ser Leu Thr Ser Gly Ile Thr Gln  
35 40 45

Leu Leu Thr Gly Ile Ser Val His Ile Val Gly Asp Ser Thr Asp Ile  
 50 55 60

Asn Glu Ala Val Ala Lys Glu Ile Ala Glu Gly Ile Gly Tyr Leu Pro  
 65 70 75 80

Val Cys Thr Ser Glu Leu Leu Glu Ser Ala Thr Glu Lys Ser Ile Asp  
 85 90 95

Lys Trp Leu Ala Ser Glu Gly Val Asp Ser Val Ala Glu Ala Glu Cys  
 100 105 110

Val Val Leu Glu Ser Leu Ser Ser His Val Arg Thr Val Val Ala Thr  
 115 120 125

Leu Gly Gly Lys Gln Gly Ala Ala Ser Arg Phe Asp Lys Trp Gln Tyr  
 130 135 140

Leu His Ala Gly Phe Thr Val Trp Leu Ser Val Ser Asp Ala Ser Asp  
 145 150 155 160

Glu Ala Ser Ala Lys Glu Glu Ala Arg Arg Ser Val Ser Ser Gly Asn  
 165 170 175

Val Ala Tyr Ala Lys Ala Asp Val Val Val Lys Leu Gly Gly Trp Asp  
 180 185 190

Pro Glu Tyr Thr Arg Ala Val Ala Gln Gly Cys Leu Val Ala Leu Lys  
 195 200 205

Gln Leu Thr Leu Ala Asp Lys Lys Leu Ala Gly Lys Lys Ser Leu Tyr  
 210 215 220

Met Arg Leu Gly Cys Arg Gly Asp Trp Pro Asn Ile Glu Pro Pro Gly  
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Trp Asp Pro Asp Ser Asp Ala Pro Pro Thr Asn Ile  
 245 250

<210> 19  
 <211> 960  
 <212> DNA  
 <213> Sorghum

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<210> 20  
 <211> 245  
 <212> PRT  
 <213> Sorghum

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Ser Ala Lys Ser Ala Gly Thr Gly Lys Val His Tyr Ser Thr Asp Glu  
 20 25 30

Ala Leu Ile Leu Gln Gln Lys Ala Gln Asp Val Leu Pro Tyr Leu Asp  
 35 40 45

Gly Arg Cys Val Tyr Leu Val Gly Met Met Gly Ser Gly Lys Thr Thr  
 50 55 60

Val Gly Lys Ile Leu Ala Glu Val Leu Gly Tyr Ser Phe Phe Asp Ser  
 65 70 75 80

Asp Lys Leu Val Glu Lys Ala Val Gly Ile Ser Ser Val Ala Glu Ile  
 85 90 95

Phe Gln Leu His Ser Glu Ala Phe Phe Arg Asp Asn Glu Ser Glu Val  
 100 105 110

Leu Arg Asp Leu Ser Ser Met His Arg Leu Val Val Ala Thr Gly Gly  
 115 120 125

Gly Ala Val Ile Arg Pro Ile Asn Trp Ser Tyr Met Lys Lys Gly Leu  
 130 135 140

Thr Val Trp Leu Asp Val Pro Leu Asp Ala Leu Ala Arg Arg Ile Ala  
 145 150 155 160

Ala Val Gly Thr Ala Ser Arg Pro Leu Leu His Gln Glu Ser Gly Asp  
 165 170 175

Pro Tyr Ala Lys Ala Tyr Ala Lys Leu Thr Ser Leu Phe Glu Gln Arg  
 180 185 190

Met Asp Ser Tyr Ala Asn Ala Asp Ala Arg Val Ser Leu Glu His Ile  
 195 200 205

Ala Leu Lys Gln Gly His Asn Asp Val Thr Ile Leu Thr Pro Ser Ala  
 210 215 220

Ile Ala Ile Glu Ala Leu Leu Lys Met Glu Ser Phe Leu Thr Glu Lys  
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Thr Met Val Arg Asn  
 245

<210> 21  
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<212> DNA  
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<400> 21

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atattctgg ttggttgaa gagctctttt aaaaacttagtt tggggaaagct gctggctgat 300
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 <213> Glycine max

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Pro	Ser	Asn	Phe	Leu	Gln	Phe	Lys	His	Gln	Asn	Ser	Phe	Leu	Lys	Phe
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Pro	Asn	Pro	Asn	Leu	His	Arg	Leu	Arg	Arg	Leu	Asn	Cys	Ser	Val	Ser
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Asp	Gly	Thr	Val	Ser	Ser	Leu	Gly	Ala	Thr	Asp	Ser	Ser	Leu	Ala	
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55														60	
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Pro	Asn	Pro	Asn	Leu	His	Arg	Leu	Arg	Arg	Leu	Asn	Cys	Ser	Val	Ser
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														40	
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Asp	Gly	Thr	Val	Ser	Ser	Leu	Gly	Ala	Thr	Asp	Ser	Ser	Leu	Ala	
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Pro	Asn	Pro	Asn	Leu	His	Arg	Leu	Arg	Arg	Leu	Asn	Cys	Ser	Val	Ser
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Asp	Gly	Thr	Val	Ser	Ser	Leu	Gly	Ala	Thr	Asp	Ser	Ser	Leu	Ala	
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55														60	
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Pro	Asn	Pro	Asn	Leu	His	Arg	Leu	Arg	Arg	Leu	Asn	Cys	Ser	Val	Ser
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Asp	Gly	Thr	Val	Ser	Ser	Leu	Gly	Ala	Thr	Asp	Ser	Ser	Leu	Ala	
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Pro	Asn	Pro	Asn	Leu	His	Arg	Leu	Arg	Arg	Leu	Asn	Cys	Ser	Val	Ser
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Asp	Gly	Thr	Val	Ser	Ser	Leu	Gly	Ala	Thr	Asp	Ser	Ser	Leu	Ala	
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55														60	
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Pro	Asn	Pro	Asn	Leu	His	Arg	Leu	Arg	Arg	Leu	Asn	Cys	Ser	Val	Ser
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														40	
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Asp	Gly	Thr	Val	Ser	Ser	Leu	Gly	Ala	Thr	Asp	Ser	Ser	Leu	Ala	
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Pro	Asn	Pro	Asn	Leu	His	Arg	Leu	Arg	Arg	Leu	Asn	Cys	Ser	Val	Ser
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														40	
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Asp	Gly	Thr	Val	Ser	Ser	Leu	Gly	Ala	Thr	Asp	Ser	Ser	Leu	Ala	
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Pro	Asn	Pro	Asn	Leu	His	Arg	Leu	Arg	Arg	Leu	Asn	Cys	Ser	Val	Ser
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Asp	Gly	Thr	Val	Ser	Ser	Leu	Gly	Ala	Thr	Asp	Ser	Ser	Leu	Ala	
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55														60	
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Pro	Asn	Pro	Asn	Leu	His	Arg	Leu	Arg	Arg	Leu	Asn	Cys	Ser	Val	Ser
														35	

  

														40	
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Asp	Gly	Thr	Val	Ser	Ser	Leu	Gly	Ala	Thr	Asp	Ser	Ser	Leu	Ala	
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55														60	
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Pro	Asn	Pro	Asn	Leu	His	Arg	Leu	Arg	Arg	Leu	Asn	Cys	Ser	Val	Ser
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														40	
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Asp	Gly	Thr	Val	Ser	Ser	Leu	Gly	Ala	Thr	Asp	Ser	Ser	Leu	Ala	
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Pro	Asn	Pro	Asn	Leu	His	Arg	Leu	Arg	Arg	Leu	Asn	Cys	Ser	Val	Ser
														35	

  

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Asp	Gly	Thr	Val	Ser	Ser	Leu	Gly	Ala	Thr	Asp	Ser	Ser	Leu	Ala	
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														55	
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Pro	Asn	Pro	Asn	Leu	His	Arg	Leu	Arg	Arg	Leu	Asn	Cys	Ser	Val	Ser
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														40	
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Asp	Gly	Thr	Val	Ser	Ser	Leu	Gly	Ala	Thr	Asp	Ser	Ser	Leu	Ala	
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Pro	Asn	Pro	Asn	Leu	His	Arg	Leu	Arg	Arg	Leu	Asn	Cys	Ser	Val	Ser
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Asp	Gly	Thr	Val	Ser	Ser	Leu	Gly	Ala	Thr	Asp	Ser	Ser	Leu	Ala	
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Pro	Asn	Pro	Asn	Leu	His	Arg	Leu	Arg	Arg	Leu	Asn	Cys	Ser	Val	Ser
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Asp	Gly	Thr	Val	Ser	Ser	Leu	Gly	Ala	Thr	Asp	Ser	Ser	Leu	Ala	
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Pro	Asn	Pro	Asn	Leu	His	Arg	Leu	Arg	Arg	Leu	Asn	Cys	Ser	Val	Ser
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Asp	Gly	Thr	Val	Ser	Ser	Leu	Gly	Ala	Thr	Asp	Ser	Ser	Leu	Ala	
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Pro	Asn	Pro	Asn	Leu	His	Arg	Leu	Arg	Arg	Leu	Asn	Cys	Ser	Val	Ser
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Asp	Gly	Thr	Val	Ser	Ser	Leu	Gly	Ala	Thr	Asp	Ser	Ser	Leu	Ala	
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Pro	Asn	Pro	Asn	Leu	His	Arg	Leu	Arg	Arg	Leu	Asn	Cys	Ser	Val	Ser
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Asp
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Thr Ser Ser Thr Asn Leu Gly Leu Leu Arg His Gly Ile Ser Leu Trp  
165 170 175

Ile Asp Val Pro Leu Asp Phe Val Ala Arg Asp Val Ile Glu Asp Lys  
180 185 190

Ser Gln Phe Ala Pro Ser Glu Ile Ser Ile Ser Gly Ser Tyr Pro Glu  
195 200 205

Val Gln Asp Glu Leu Gly Ala Leu Tyr Asp Lys Tyr Arg Val Gly Tyr  
210 215 220

Ala Thr Ala Asp Ala Ile Ile Ser Val Gln Lys Val Val Ser Arg Leu  
225 230 235 240

Gly Cys Asp Asn Leu Asp Glu Ile Thr Arg Glu Asp Met Ala Leu Glu  
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Ala Leu Arg Glu Ile Glu Lys Leu Thr Arg Val Lys Lys Met Gln Glu  
260 265 270

Glu Ala Ala Arg Pro Phe  
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<213> Glycine max

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gggagaagac caccattcag tacatgtcgt ttgggtgtgt ctcggaaacc gcagagccctt 180  
cgggtttttg ttccgccaat gatgatgcgg cgcagaacaa ccgcatttggg ggtttccctt 240  
tcttacgaca acatttcagc ttcaattttg gaatctggg ggcgttcatgc tcctcttgat 300  
gaagagctga ttctaaagaa tagatcacaa gagaccacgc catattnaaa tggacgctgt 360  
atttatcttg ttgaaatgat gggctctggg aaaacaacag tgggaaagat aatgtcgcaa 420  
gtgcttgggtt attcattttg tgatagtgat gcatttgggg aggacgacgt tggtgaaac 480  
tctgttagccg atatatttga gcaacatggt gagactttc 519

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<212> PRT

<213> Glycine max

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Pro Glu Arg Phe Gly Arg Arg Pro Pro Phe Ser Thr Cys Arg Leu Gly  
20 25 30

Val Ser Arg Glu Pro Gln Ser Leu Arg Val Phe Val Ser Pro Met Met  
35 40 45

Met Arg Arg Arg Thr Thr Ala Leu Glu Val Ser Ser Ser Tyr Asp Asn  
50 55 60

Ile Ser Ala Ser Ile Leu Glu Ser Gly Ser Val His Ala Pro Leu Asp  
65 70 75 80

Glu Glu Leu Ile Leu Lys Asn Arg Ser Gln Glu Thr Gln Pro Tyr Leu  
85 90 95

Asn Gly Arg Cys Ile Tyr Leu Val Gly Met Met Gly Ser Gly Lys Thr  
100 105 110

Thr Val Gly Lys Ile Met Ser Gln Val Leu Gly Tyr Ser Phe Cys Asp  
115 120 125

Ser Asp Ala Leu Val Glu Asp Asp Val Gly Gly Asn Ser Val Ala Asp  
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Ile Phe Glu Gln His Gly Glu Thr Phe  
145 150

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caccgatccc atccgtggcg ccagcctcaa ggccctgtgc tgccacaaaat cggcaggatc 180  
tgagaaagcc cactattctg ctgatgaggc tctcgacta aagaaaaaag cagaggacgt 240  
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ggttgagcag tctgttggca taccgtcggt ggctgagatt tttcaggatcc acagtgaagc 420  
attcttcaga gataacgaga gtgaggtaact aagggatttg tcgtcaatgc accgattaaat 480  
tgttcaaca ggaggtgggtt cggtgatacg accaatcaat tggagttata tgaagaaaagg 540  
actcactatt tggtagatg ttccatttggca cggccatttgcg agaaggatttgc ctgcgggtttg 600  
tactgcgtca cgacccttc tgcatcgatgga atctggtgat ccttatgcaaa aggccatatgc 660  
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tgccatcgct attgaggcat tgctaaagat ggagagctt cttacttgaga aggccatgg 840  
cagaaactga ccagatctcg gtggttacca agaaagatga caaccaacgg ttcttggtt 900  
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catcgatgtt gatatccct tgcattttt gacacaacca taatttacat caacataacta 1140  
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cttataacccctt cctatcgat tctactgtat cccccggggg gggcccggtc tccaaactctc 1260  
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ggg 1323

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<212> PRT

<213> Triticum aestivum

<400> 26

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20 25 30

Arg Thr Asp Ala Gly Ser Arg Ser Thr Asp Pro Ile Arg Gly Ala Ser  
35 40 45

Leu Lys Ala Leu Cys Cys His Lys Ser Ala Gly Thr Glu Lys Ala His  
50 55 60

Tyr Ser Ala Asp Glu Ala Leu Val Leu Lys Gln Lys Ala Glu Asp Val  
65 70 75 80

Leu Pro Tyr Leu Asn Asp Arg Cys Val Tyr Leu Val Gly Met Met Gly  
85 90 95

Ser Gly Lys Thr Thr Val Gly Lys Ile Ile Ala Glu Val Leu Gly Tyr  
100 105 110

Ser Phe Phe Asp Ser Asp Lys Leu Val Glu Gln Ser Val Gly Ile Pro  
115 120 125

Ser Val Ala Glu Ile Phe Gln Val His Ser Glu Ala Phe Phe Arg Asp  
130 135 140

Asn Glu Ser Glu Val Leu Arg Asp Leu Ser Ser Met His Arg Leu Ile  
145 150 155 160

Val Ala Thr Gly Gly Ala Val Ile Arg Pro Ile Asn Trp Ser Tyr  
165 170 175

Met Lys Lys Gly Leu Thr Ile Trp Leu Asp Val Pro Leu Asp Ala Leu  
180 185 190

Ala Arg Arg Ile Ala Ala Val Gly Thr Ala Ser Arg Pro Leu Leu His  
195 200 205

Gln Glu Ser Gly Asp Pro Tyr Ala Lys Ala Tyr Ala Lys Leu Thr Ala  
210 215 220

Leu Phe Glu Gln Arg Met Asp Ser Tyr Ala Asn Ala Asp Ala Arg Val  
225 230 235 240

Ser Leu Glu Asn Ile Ala Phe Lys Gln Gly His Asn Asp Val Asn Val  
245 250 255

Leu Thr Pro Ser Ala Ile Ala Ile Glu Ala Leu Leu Lys Met Glu Ser  
260 265 270

Phe Leu Thr Glu Lys Ala Met Val Arg Asn  
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cttgcataac tccgttgacg atgccctttt gttgaagaga aaatcagaag agtttctttt 180  
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 Val Arg Ala Arg Gly Ala Lys Pro Val Val Pro Leu Arg Ala Lys Lys  
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 Ser Ser Gly Gly His Glu Asn Leu His Asn Ser Val Asp Asp Ala  
 35 40 45  
  
 Leu Leu Leu Lys Arg Lys Ser Glu Glu Val Leu Phe Gln Leu Asn Gly  
 50 55 60  
  
 Arg Cys Ile Tyr Leu Val Gly Met Met Gly Ser Gly Lys Ser Thr Val  
 65 70 75 80  
  
 Gly Lys Ile Leu Ala Glu Val Leu Gly Tyr Ser Phe Phe Asp Ser Asp  
 85 90 95  
  
 Lys Leu Val Glu Gln Ala Val Gly Met Pro Ser Val Ala Gln Ile Phe  
 100 105 110  
  
 Lys Val His Ser Glu Ala Phe Phe Arg Asp Asn Glu Ser Ser Val Leu  
 115 120 125  
  
 Arg Asp Leu Ser Ser Met Arg Arg Leu Val Val Ala Thr Gly Gly  
 130 135 140  
  
 Ala Val Ile Arg Pro Val Asn Trp Lys Asn Met Lys Lys Gly Leu Ser  
 145 150 155 160  
  
 Val Trp Leu Asp Val Pro Leu Glu Ala Leu Ala Arg Arg Ile Ala Lys  
 165 170 175  
  
 Val Gly Thr Ala Ser Arg Pro Leu Leu Asp Gln Pro Ser Gly Asp Pro  
 180 185 190  
  
 Tyr Thr Met Ala Phe Ser Lys Leu Ser Met Leu Ala Glu Gln Arg Gly  
 195 200 205  
  
 Asp Ala Tyr Ala Asn Ala Asp Val Arg Val Ser Leu Glu Glu Ile Ala  
 210 215 220

Ser Lys Leu Gly His Asp Asp Val Ser Lys Leu Thr Pro Ile Asp Ile  
225 230 235 240

Ala Leu Glu Ser Leu His Lys Ile Glu Ser Phe Val Val Glu Asp Thr  
245 250 255

Ala Val Ala Asp Ser Gln Thr Glu Ser Gln Ser Gln Arg Met His Thr  
260 265 270

Leu